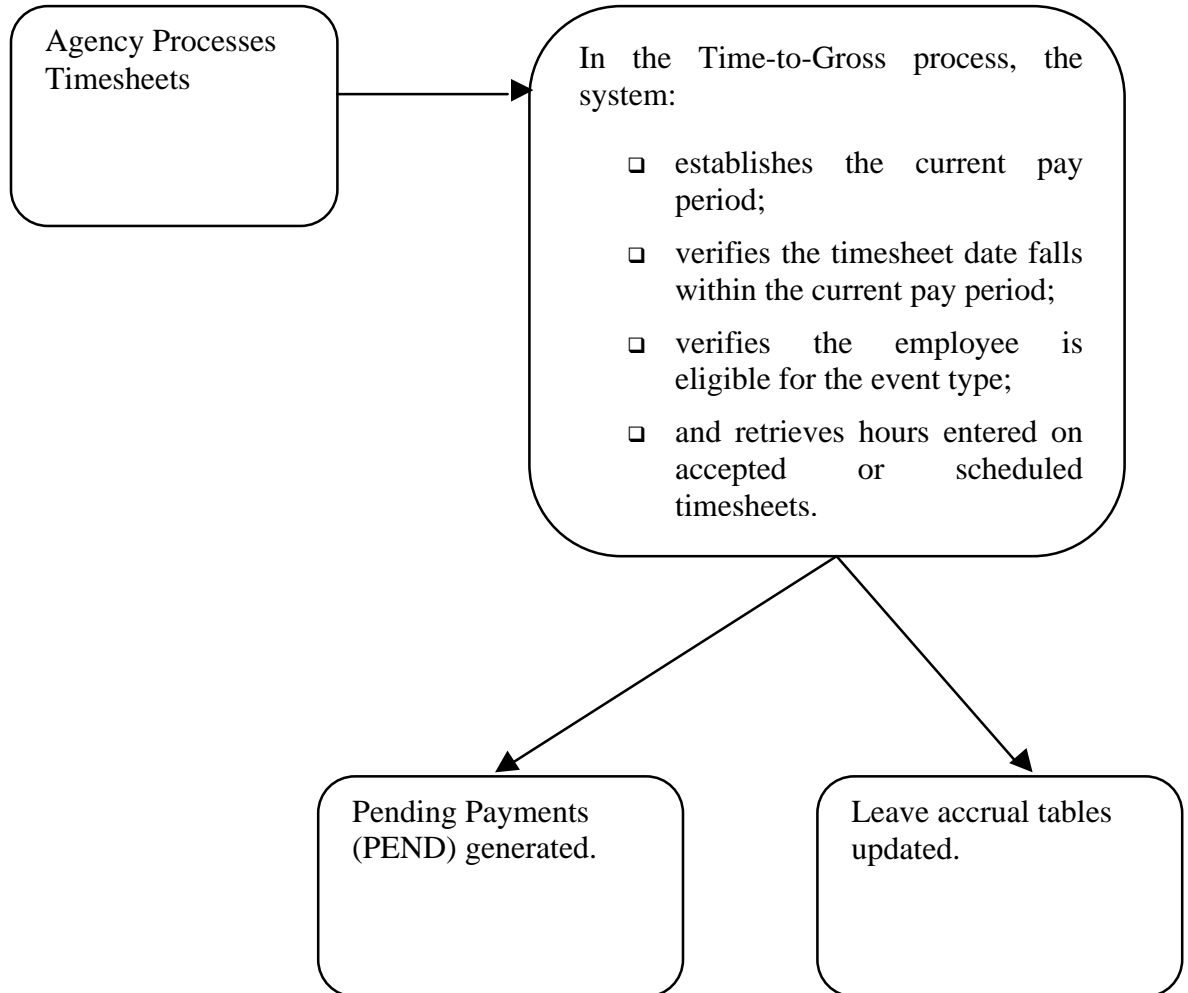# TOPIC 3: PAY CALCULATIONS

The purpose of this topic is to provide an overview of how the SAM II/HR Payroll System calculates pay for employees. This topic will review Standard Pay Period Hours; Standard Pay Period Hours vs. Actual Pay Period Hours; Standard Pay Period Hours and Calculated Daily Rates; and Timesheet Pay Calculations.

At the end of this topic, you will be able to:

- Describe the Time – to – Gross and Gross – to – Net processes
- Describe the function of Standard Pay Period Hours, how they were calculated, and how they impact pay
- Describe how the system calculates pay for New Hires, Schedule Changes, Pay Rate Changes, and Movement from Exception to Positive Paid (or vice versa)
- Describe the differences in calculating Leave Without Pay when recorded using an Employee Status Maintenance (ESMT) transaction or a timesheet document

TIME – TO – GROSS PROCESS

Agency Processes Timesheets

In the Time-to-Gross process, the system:

- ❑ establishes the current pay period;
- ❑ verifies the timesheet date falls within the current pay period;
- ❑ verifies the employee is eligible for the event type;
- ❑ and retrieves hours entered on accepted or scheduled timesheets.

Pending Payments (PEND) generated.

Leave accrual tables updated.

TIME – TO – GROSS PROCESS

The SAM II HR/Payroll system calculates pay based on the output from Time-to-Gross and Gross-to-Net. Time-to-Gross translates the employee's hours worked to gross pay based on gross pay data and does additional processing such as leave processing.

Time-to-Gross Process

In the Time-to-Gross process, the system:

- ❑ establishes the current pay period;

- ❑ verifies the timesheet date falls within the current pay period;

- ❑ verifies the employee is eligible for the event type;

- ❑ and retrieves hours entered on accepted or scheduled timesheets.

For exception-paid employees, Time-to-Gross is run only for processing of leave activity and time exceptions such as overtime. For positive paid employees, all hours worked or taken such as leave will be included in the Time-to-Gross process.

Once this is done, the system then converts the time to gross pay by multiplying the time by the calculated hourly wage and updates the Pending Payment (PEND) window. Pending payments are processed during pay cycle processing. Leave activity is posted to the appropriate tables and inquiries.

For the majority of agencies, timesheet activity is processed through the various timesheets online. In a few cases, some agencies will submit an interface to the Office of Administration, Division of Accounting. Only those timesheets that are in a SCHED (Scheduled) or ACCPT (Accepted) status will be run during the Time-to-Gross process. If there are any errors detected, the system will reject the timesheets. Agencies will need to correct any errors before the next Time-to-Gross process.

GROSS – TO – NET PROCESS

References Gross Pay
established in the Time
– to – Gross Process.

During the payroll run, Gross-to-Net selects a group of employees based
on the period they are being paid and performs the following functions:

❑ Calculates the exception-paid employee's gross pay based on the
pay rates associated with the employee.

❑ Checks for positive gross pay for all employees (positive paid and
exception paid) on the Pending Payment (PEND) table.

❑ Calculates FLSA for non-exempt employees.

❑ Checks for deductions for all employees on the Pending
Deduction (PDED) table and calculates benefits and deductions.

❑ Adds all payments and subtracts all deductions to arrive at net pay.

❑ Updates summary/inquiry tables.

❑ Prints actual pay checks and EFT advices.

Pending Payments
Processed

GROSS – TO – NET PROCESS

During the payroll run, Gross-to-Net selects a group of employees based on the period they are being paid and performs the following functions:

❑ Calculates the exception-paid employee's gross pay based on the pay rates associated with the employee.

❑ Checks for positive gross pay for all employees (positive paid and exception paid) on the Pending Payment (PEND) table.

❑ Calculates FLSA for non-exempt employees.

❑ Checks for deductions for all employees on the Pending Deduction (PDED) table and calculates benefits and deductions.

❑ Adds all payments and subtracts all deductions to arrive at net pay.

❑ Updates summary/inquiry tables.

❑ Prints actual pay checks and EFT advices.

PEND establishes payments to be picked up for the Gross-to-Net processing. Pending payments will be processed during the offline pay cycle process (Gross-to-Net). Unapproved or Held Pending Payments not processed during the Gross-to-Net process will remain on the PEND window until further action is taken. Gross-to-Net accumulates the employees' gross pay data and does additional processing such as deduction and FLSA processing.

Gross-to-Net Regular and Gross-to-Net Supplemental is performed offline nightly, immediately before regular and/or supplemental pay cycles.

STANDARD PAY PERIOD HOURS

In order to pay exception paid employees consistently, standard pay period hours have been established as 86.667 pay hours per pay period.

FORMULA

2080 hours divided by 24

> = **2080 annual work hours**
> / **24 semi-monthly pay periods**
> = **86.667 standard pay hours per pay period**

STANDARD PAY PERIOD HOURS

The SAM II HR/Payroll System has been set up to assure that State of Missouri exception paid employees are paid on a consistent salaried basis from pay period to pay period.

In order to pay exception paid employees consistently, standard pay period hours have been established as 86.667 pay hours per pay period.

FORMULA

2080 hours divided by 24

> = 2080 annual work hours

> / 24 semi-monthly pay periods

> = 86.667 standard pay hours per pay period

Standardizing the pay period hours in the SAM II HR/Payroll System serves two purposes:

1. Pays a consistent amount to exception-paid employees each pay period, even though the number of hours in a pay period fluctuate;

2. Calculates a consistent hourly rate to apply to time and leave entered onto system timesheets based on 2080 hours in a year.

The SAM II HR/Payroll system will pay employees consistently each pay period, even though the actual number of hours in the pay period may fluctuate.

Example: Employee A works 8 hours a day. If Pay Period 1 is 11 days, the system would calculate 88 hours to be worked. Now, let's say Pay Period 2 is 10 days, the system would calculate 80 hours. If pay was calculated hourly, the two pay checks would be different. However, Standard Pay Period hours ensures that the pay does not fluctuate.

Let's look at a couple of common scenarios.

STANDARD PAY PERIOD HOURS

SCENARIO #1: The pay period is 80 hours and the employee is absent from work the entire pay period.

SCENARIO #2: The pay period is 88 hours and the employee is absent from work the entire pay period.

Standard Pay Period Hours

SCENARIO #1: The pay period is 80 hours and the employee is absent from work the entire pay period.

Since SAM II is utilizing the standard hours of 86.667, the processing of only 80 hours as the actual pay period hours will result in 6.667 hours of pay being unaffected that pay period. In this case, the system would reflect 80 hours of Leave and 6.667 hours of Regular pay.

RESULT:

If the employee took Leave without Pay for 80 hours, the system would dock the employee 80 hours of pay and generate a Regular Paycheck for 6.667 hours.

If the employee took Paid Leave, the system would decrease the employee's leave balance by 80 hours and generate a Regular Paycheck for the standard hours of 86.667.

SCENARIO #2: The pay period is 88 hours and the employee is absent from work the entire pay period.

RESULT

If the employee took Paid Leave, the system will decrease the employee's leave balance by 88 hours and generate a Regular Paycheck for the standard hours of 86.667.

If the employee took Leave without Pay, only the standard hours of 86.667 will be reduced from the employee's paycheck for that pay period. The employee is not eligible for a paycheck in this pay cycle and the remaining 1.333 hours Leave without Pay will be taken from the employee's next paycheck.

CALCULATED DAILY RATE

IMPACTS PAY WHEN THE FOLLOWING STATUSES CHANGE DURING A PAY PERIOD

- ❑ **New Hires,**

- ❑ **Changes in Pay Rate,**

- ❑ **Changes in Schedule, and**

- ❑ **Moving from Exception to Positive Paid, or vice versa.**

STANDARD PAY PERIOD HOURS AND CALCULATED DAILY RATE

Daily rates are used when a change is made to an employee's status during a pay period. If the change in status takes effect on the first day of the pay period, then the standard pay period hours are used. How pay calculations are impacted by an employee status change during a pay period are:

- ❑ New Hires,

- ❑ Changes in Pay Rate,

- ❑ Changes in Schedule, and

- ❑ Moving from Positive to Exception Paid, or vice versa.

All of these changes impact only exception paid employees since they are the only employees who have standard pay period hours. Remember, changes in employee status are made using the Employee Status Maintenance (ESMT) transaction. The effective date on the ESMT will determine when the status change will begin.

New Hires

When an employee is newly hired during a pay period, their pay will be calculated based upon their work schedule, pay rate, and the number of days left in the pay period. This will be prorated against the Standard Pay Period hours to determine their pay amount for the first pay period. Once the next pay period begins, then their standard pay period amount will take effect.

Changes in Pay Rate

Some of the reasons an employee's pay rate may change include promotions or changing positions. If this change takes effect during a pay period, the system will calculate their rate of pay for the time they were at their original pay rate and for the time period they were at their new pay rate. This is done using the standard pay period hours for that employee. Once the next pay period begins, then their standard pay based upon the new pay rate will take effect.

Changes in Schedule

An employee's work schedule can change for various reasons. If the only thing that has changed is the work schedule, then the pay for an exception paid employee would remain the same. Since positive paid employees are hourly paid, then their pay checks are not based on Standard Pay Period Hours.

STANDARD PAY PERIOD HOURS AND CALCULATED DAILY RATE: Changes in Pay Rate

Let's assume that the pay period days were represented in the table below. The change in pay rate is illustrated.

Sun	Mon	Tues	Wed	Thur	Fri	Sat
	1 Pay Rate 1	2 Pay Rate 1	3 Pay Rate 1	4 Pay Rate 1	5 Pay Rate 1	6 OFF
7 OFF	8 Pay Rate 2	9 Pay Rate 2	10 Pay Rate 2	11 Pay Rate 2	12 Pay Rate 2	13 OFF
14 OFF	15 Pay Rate 2					

In calculating the pay for this employee, the system will take:

Step 1: { 5 Pay Rate 1 Worked Days /
11 Total days worked =
0.454545 } * $1000 =
$454.55

Step 2: { 6 Pay Rate 2 Worked Days /
11 Total days worked =
0.545454 } * $1150 =
$627.27

Step 3: $454.55 + $627.27 = $1081.82.

STANDARD PAY PERIOD HOURS AND CALCULATED DAILY RATE: Changes in Pay Rate

Pay rate changes will impact the standard pay period amount. If the pay rate change takes effect during a pay period, then the pay will be a combined calculation of days worked at pay rate 1 plus days worked at pay rate 2.

Let's look at the following example.

Your employee has a standard pay period amount of $1000. On the 8th day of the pay period, the standard pay period amount is increased to $1150.

Let's assume that the pay period days were represented in the table below. The change in pay rate is illustrated.

Sun	Mon	Tues	Wed	Thur	Fri	Sat
	1	2	3	4	5	6
	Pay Rate 1	Pay Rate 1	Pay Rate 1	Pay Rate 1	Pay Rate 1	OFF
7	8	9	10	11	12	13
OFF	Pay Rate 2	Pay Rate 2	Pay Rate 2	Pay Rate 2	Pay Rate 2	OFF
14	15					
OFF	Pay Rate 2					

In calculating the pay for this employee, the system will take:

Step 1: { Pay Rate 1 Worked Days / Total days worked } * 1st Pay Period Amount

Step 2: { Pay Rate 2 Worked Days / Total days worked } * 2nd Pay Period Amount

Step 3:   Step 1 + Step 2 = Total Pay for Pay Period.

Our Scenario: ((# days at Rate 1 / Total work days) * Pay Rate 1) +
((# days at Rate 2 / Total work days) * Pay Rate 2) =
Gross Pay Period Amount

CHANGING PAY CLASS DURING A PAY PERIOD.

Let's assume that the pay period days were represented in the table below. The change in work schedule and pay rate is illustrated. The employee's positive pay hourly rate is $12.50 and they worked 8 hours per day. Their regular pay period amount will be $1000.00.

Sun	Mon	Tues	Wed	Thur	Fri	Sat
	1 Pos Pay	2 Pos Pay	3 Pos Pay	4 Pos Pay	5 Pos Pay	6 OFF
7 OFF	8 Exc Pay	9 Exc Pay	10 Exc Pay	11 Exc Pay	12 Exc Pay	13 OFF
14 OFF	15 Exc Pay					

First ESMT

Effective Date: **Day 8**
Personnel Action: **Change Condition or Rehire**
Personnel Reason: **Select Appropriate Reason**
Pay Class: **Override to HRLY**
(Complete the remaining required information on the ESMT)

Second ESMT

Effective Date: **Day 16**
Personnel Action: **Change Condition**
Personnel Reason: **Pay Class Change (C26)**
Pay Class: **Change to Correct Exception Paid Pay Class (i.e., PUS)**

CHANGING PAY CLASS DURING A PAY PERIOD

Occasionally, employees will move from positive to exception paid or vice versa. When this occurs at <u>the beginning of a pay period</u> (the 1st or 16th of the month), the system will do the appropriate pay calculations. However, when this occurs on a date <u>during the pay period</u>, special processing is required to ensure an accurate paycheck. Once the next pay period begins, the standard pay period amount will take effect. If the change occurs during a pay period, the exception paid appointments Pay Class must be overridden to HRLY on the ESMT.

If the employee is moving from an exception to positive paid position during the pay period, the only an ESMT would be processed effective the first day of the pay period for the exception paid appointment overriding the Pay Class to HRLY. For example, if effective December 8, 2000 an employee moves from an exception paid appointment to a positive paid appointment, then an ESMT would be completed effective December 1, 2000 for the exception paid appointment overriding the Pay Class to HRLY. Once the ESMT establishing the positive paid appointment effective December 9, 2000 then the employee will continue with a Pay Class of HRLY.

If the employee is moving from positive to exception paid during a pay period, two ESMT's must be processed for the exception paid appointment. The first ESMT will establish the new appointment and override the Pay Class to HRLY for the remainder of the pay period. A second ESMT will be processed effective the first day of the next pay period to establish the correct exception paid Pay Class. For example, if an employee moves from a positive to exception paid position effective December 8, 2000, an ESMT will be processed with an effective date of December 8 and the Pay Class will be left as HRLY. On December 16, 2000, a second ESMT will be processed to change the Pay Class to the correct exception paid value.

LEAVE WITHOUT PAY CALCULATIONS

Sun	Mon	Tues	Wed	Thur	Fri	Sat
	1 LWOP	2 LWOP	3 LWOP	4 LWOP	5 LWOP	6 OFF
7 OFF	8 LWOP	9 LWOP	10 LWOP	11 LWOP	12 LWOP	13 OFF
14 OFF	15 LWOP					

ESMT EXAMPLE

Not Affected by Changes in Pay Period Hours

Pay Check for Pay Period 1 = Zero Dollars
Pay Check for Pay Period 2 = $1000

TIMESHEET EXAMPLE

Affected by Changes in Pay Period Hours

Pay Check for Pay Period 1 = Zero Dollars
Pay Check for Pay Period 2 = $984.65

LEAVE WITHOUT PAY CALCULATIONS

Leave Without Pay calculations are determined by how it is recorded in SAM II HR/Payroll. You can record a Leave Without Pay status on the Employee Status Maintenance (ESMT) window. You will want to do this if the LWOP is for a determined length of time. Leave Without Pay can also be entered on the timesheet.

Pay is established on the ESMT using the annualized Standard Pay Period Hours and is not impacted by changes in the pay period activity. However, for timesheets, pay is established based upon hours entered into a timesheet. That is why you can have variations in pay amounts for exception paid employees when you have certain types of changes during a pay period.

Leave Without Pay is an example of this. How you record the Leave Without Pay can make a difference in how the system calculates pay. Let's look at an example and see how it would vary between ESMT and timesheet entry.

Your employee needs to take leave without pay for the entire 11 day pay period. After this pay period, the employee will return to work. Their Standard Pay Period Amount is $1000.

If an ESMT is used to record the LWOP status change, the employee's pay checks over the two pay periods would be:

- ❑ Pay Check for Pay Period 1 = Zero Dollars
- ❑ Pay Check for Pay Period 2 = $1000

If a Timesheet is used to record the LWOP status change, the employee's pay checks over the two pay periods would be:

- ❑ Pay Check for Pay Period 1 = Zero Dollars
- ❑ Pay Check for Pay Period 2 = $984.65

Let's look at more detail to determine how these amounts were calculated.

LEAVE WITHOUT PAY CALCULATIONS

Sun	Mon	Tues	Wed	Thur	Fri	Sat
	1 LWOP	2 LWOP	3 LWOP	4 LWOP	5 LWOP	6 OFF
7 OFF	8 LWOP	9 LWOP	10 LWOP	11 LWOP	12 LWOP	13 OFF
14 OFF	15 LWOP					

ESMT EXAMPLE

Not Effected by Changes in Pay Period Hours

Pay Check for Pay Period 1 = Zero Dollars
Pay Check for Pay Period 2 = $1000

TIMESHEET EXAMPLE

Effected by Changes in Pay Period Hours

Pay Check for Pay Period 1 = Zero Dollars
Pay Check for Pay Period 2 = $984.61

How the system determines an exception paid employee's hourly rate for the timesheet:

Pay Period Amount/Standard number of Hours in a Pay Period = hourly rate

$1000/86.67 = $11.54

LEAVE WITHOUT PAY CALCULATIONS

Your employee needs to take leave without pay for the entire pay period which is 11 days. After this pay period, the employee will return to work. Their Standard Pay Period Amount is $1000. The pay period is laid out as follows.

Sun	Mon	Tues	Wed	Thur	Fri	Sat
	1 LWOP	2 LWOP	3 LWOP	4 LWOP	5 LWOP	6 OFF
7 OFF	8 LWOP	9 LWOP	10 LWOP	11 LWOP	12 LWOP	13 OFF
14 OFF	15 LWOP					

ESMT Scenario

In this scenario, if the ESMT was used to record the change in status, the employee's pay check would be zero for this pay period. Since the employee will be back at work effective the following pay period, another ESMT would need to be processed. Their pay check for the next pay period would reflect their normal Standard Pay Period Amount.

❑ Pay Check for Pay Period 1 = Zero Dollars

❑ Pay Check for Pay Period 2 = Standard Pay Period Amount

Using the scenario above, the employee's pay would reflect:

❑ Pay Check for Pay Period 1 = Zero Dollars

❑ Pay Check for Pay Period 2 = $1000

Timesheet Scenario

If the LWOP was recorded on a timesheet at 8 hours per day, a total of 88 hours of LWOP would be recorded for this employee for this pay period. Remember, that the Standard Pay Period Hours are 86.667. The employee's paycheck for the first pay period would be zero. The pay check for the second pay period would be reduced by 1.333 hours of LWOP that were carried over from the previous pay period.

❑ Pay Check for Pay Period 1 = Zero Dollars

❑ Pay Check for Pay Period 2 = Standard Pay Period Amount – 1.333 hours of LWOP

Using the scenario above, the employee's pay would reflect:

❑ Pay Check for Pay Period 1 = Zero Dollars

❑ Pay Check for Pay Period 2 = $984.61

LEAVE WITHOUT PAY CALCULATIONS

Sun	Mon	Tues	Wed	Thur	Fri	Sat
1 OFF	2 LWOP	3 LWOP	4 LWOP	5 LWOP	6 LWOP	7 OFF
8 OFF	9 LWOP	10 LWOP	11 LWOP	12 LWOP	13 LWOP	14 OFF
15 OFF						

ESMT EXAMPLE

Not Effected by Changes in Pay Period Hours

Pay Check for Pay Period 1 = $0.00 (zero dollars)
Pay Check for Pay Period 2 = $1000

TIMESHEET EXAMPLE

Effected by Changes in Pay Period Hours

Pay Check for Pay Period 1 = $76.94
Pay Check for Pay Period 2 = $1000.00

How the system determines an exception paid employee's hourly rate for the timesheet:

Pay Period Amount/Standard number of Hours in a Pay Period = hourly rate

$1000/86.67 = $11.54

LEAVE WITHOUT PAY CALCULATIONS

Your employee needs to take leave without pay for the entire pay period which is 10 days. After this pay period, the employee will return to work. Their Standard Pay Period Amount is $1000. The pay period is laid out as follows.

Sun	Mon	Tues	Wed	Thur	Fri	Sat
1 OFF	2 LWOP	3 LWOP	4 LWOP	5 LWOP	6 LWOP	7 OFF
8 OFF	9 LWOP	10 LWOP	11 LWOP	12 LWOP	13 LWOP	14 OFF
15 OFF						

ESMT Scenario

In this scenario, if the ESMT was used to record the change in status, the employee's pay check would be zero for this pay period. Since the employee will be back at work effective the following pay period, another ESMT would need to be processed. Their pay check for the next pay period would reflect their normal Standard Pay Period Amount.

- ❏ Pay Check for Pay Period 1 = Zero Dollars

- ❏ Pay Check for Pay Period 2 = Standard Pay Period Amount

Using the scenario above, the employee's pay would reflect:

- ❏ Pay Check for Pay Period 1 = Zero Dollars

- ❏ Pay Check for Pay Period 2 = $1000

Timesheet Scenario

If the LWOP was recorded on a timesheet at 8 hours per day, a total of 80 hours of LWOP would be recorded for this employee for this pay period. Remember, that the Standard Pay Period Hours are 86.667. The employee's pay check for the first pay period would be 76.94 because the employee would still be paid for 6.667 hours. The pay check for the second pay period would reflect their normal Standard Pay Period Amount.

- ❏ Pay Check for Pay Period 1 = 6.67 hours of pay

- ❏ Pay Check for Pay Period 2 = Standard Pay Period Amount

Using the scenario above, the employee's pay would reflect:

- ❏ Pay Check for Pay Period 1 = 76.94

- ❏ Pay Check for Pay Period 2 = $1000.00